

Questioning Homeownership as a Public Policy Goal

by Morris A. Davis

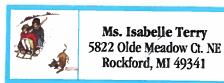
Executive Summary

For decades U.S. housing policy has focused on promoting homeownership. In this study, I show that the set of policies designed to further homeownership has been ineffective and expensive and that homeownership as a public policy goal is not well supported.

I document that homeownership rates have remained roughly constant over the past 40 years. I then show why homeownership policies have not boosted homeownership rates. The first policy I consider, the deductibility of mortgage interest from income for tax purposes, is a tax break enjoyed by people earning above-median incomes who should otherwise have no trouble buying a home. The other key policy, the subsidization of the large mortgage entities Fannie Mae and Freddie Mac for the purposes of reducing the rate of mortgage interest, has been ineffective because Fannie and Freddie

marginally affect mortgage interest rates, and mortgage interest rates are essentially uncorrelated with homeownership rates. A back-of-the-envelope calculation suggests the present value of the cost of these two policies to U.S. taxpayers is a staggering amount, \$2.5 trillion.

Finally, I show that policymakers fail to make the case for promoting homeownership as an explicit public policy goal. I note that the costs and risks of homeownership are almost never discussed by public agencies and that the benefits of homeownership as widely articulated are either hard to measure or are quickly refutable. I conclude that U.S. housing policies and government institutions designed to promote homeownership are deeply flawed. Serious discussion should occur at the highest levels about eliminating current policies and de-emphasizing homeownership as a policy objective.





Homeownership policies in the United States have had little effect on homeownership rates.

Introduction

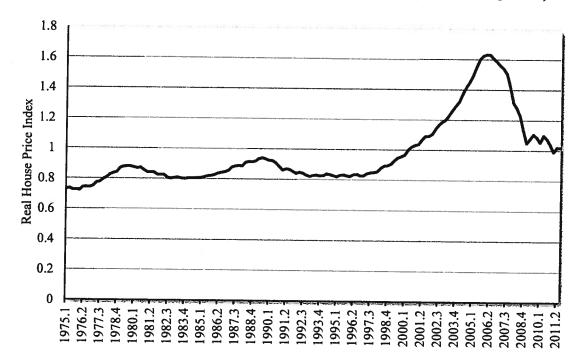
Figure 1 graphs an index of real U.S. house prices from 1975 to 2011. Prior to 1997, real house prices increased slowly but steadily, at a rate of roughly one-half percent per year. In sharp contrast to previous experience, from 1997 through 2006 house prices nearly doubled; subsequently, house prices declined by 40 percent. The collapse in housing values precipitated a wave of mortgage delinquencies and foreclosures, which ultimately caused a financial crisis and a severe global recession. It is not a stretch to say that the bust to owner-occupied housing in the United Stated led to a sizeable contraction of global economic output.

The erratic behavior of house prices in the past 15 years should naturally lead to a questioning of the nature, size, and role of housing policy in the United States. Specifically, I question the motivation and effectiveness of housing policies that subsidize or promote homeownership. I estimate that the net present value of U.S. housing policy designed to promote homeownership is \$2.5 trillion and document that homeownership policies in the United States have had little effect on homeownership rates. I then demonstrate why homeownership policies have been ineffective. Finally, I question homeownership as a public policy goal. I list the risks and costs associated with homeownership that are infrequently articulated, and then one-by-one I dispute the commonly cited benefits of homeownership. I conclude that homeownership as a public policy goal is not well supported.

What Have We Done?

The federal government directly subsidizes the cost of homeownership using two different policy instruments. These instruments attempt to lower the cost of homeownership

Figure 1
Index of Real House Prices in the United States, 1975–2011 (Index 1997Q1 = 1.0)



Sources: Federal Housing Finance Authority, http://www.fhfa.gov/Default.aspx?Page=87; and S&P/Case-Shiller Home Price Indices, http://www.standardandpoors.com/home/en/us. Deflated using core consumer price index from Bureau of Economic Analysis, U.S. Department of Commerce.

Table 1 Homeownership Rates in the United States by Decade

Year	U.S. Homeownership Rate (%)
1900	46.5
1910	45.9
1920	45.6
1930	47.8
1940	43.6
1950	55.0
1960	62.1
1970	64.2
1980	65.6
1990	63.9
2000	67.4
2010	66.9

Source: United States Census Bureau, "Housing Vacancies and Homeownership (CPS/HVS)," Table 14, http://www.census.gov/hhes/www/housing/hvs/annual11/ann11ind.html; and United States Census Bureau, "Historical Census of Housing Tables," http://www.census.gov/hhes/www/housing/census/historic/owner.htm.

by reducing the after-tax rate of interest on home mortgages. First, the cost of mortgage interest is deductible from household income for taxpayers who itemize allowable expenses. Second, the federal government acts to reduce the cost of mortgage interest by explicitly insuring the principal on mortgages purchased by the Federal Housing Authority and by guaranteeing the debt of the government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac. Fannie and Freddie, as they are commonly known, buy mortgages from banks, guarantee the performance of these mortgages against default, and then resell pools of these guaranteed mortgages to investors.

The cost of these policies is astounding. The Congressional Budget Office recently estimated that the total cost of Fannie Mae and Freddie Mac to current and future taxpayers is \$317 billion, and some economists argue that the Federal Housing Administration will lose another \$50 billion or more in the upcoming years. In addition, econo-

mists estimate that federal tax revenues would be roughly \$60 billion higher each year if the mortgage interest deduction were eliminated from the tax code.³ Assuming a 3 percent discount rate on these lost tax revenues, the net present value of the \$60 billion in annual tax losses is \$2 trillion. When added together, the net present value of the cost of housing policy designed to promote homeownership is likely on the order of \$2.5 trillion.

The data suggest that all of this spending has done little to boost homeownership rates. Table 1 reports homeownership rates by decade, as computed by the U.S. Census Bureau. Between 1900 and 1940, the U.S. homeownership rate was stable at about 45 percent. Between 1940 and 1970, the homeownership rate increased by 20 percentage points, to about 65 percent. In comparison, since 1970 the homeownership rate has increased by only 2 percentage points—small potatoes compared to the change between 1940 and 1970. It is possible that homeown-

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ership rates would currently be lower in the absence of federal policy, but I will present evidence below that suggests this is not the case.

Why Is Federal Policy Ineffective?

The tax code provides incentives for homeownership only to families that "itemize" their expenses. This weakens the effectiveness of the policy, especially for lowerincome households. I will illustrate this with a thought experiment. Table 2 shows the outcome of an economy populated by identical people all living in identical housing that costs \$100,000 per unit. People in this economy all own exactly one home and choose between being owner-occupiers or landlords. To keep matters simple, when people are landlords, they rent their housing unit from themselves; that is, they pay and collect rental income from themselves. Since all housing is identical, in this thought experiment people are assumed to choose the ownership status-owner-occupier or landlord—that provides the most after-tax rental income. Rental income is imputed in the case of owner-occupancy.

The first two columns of Table 2 show two scenarios related to owner-occupancy. In the first column, owner-occupiers itemize expenses on their tax returns, meaning they can directly deduct mortgage interest from their labor and capital income for the purposes of computing their income tax liability. In the second column, all assumptions are the same as in the first column, except owner-occupiers do not itemize. In columns 1 and 2, owner-occupiers are not allowed to deduct depreciation expenses.

The third and fourth columns show two scenarios related to renting and being a landlord. Landlords are assumed to be able to deduct mortgage interest and depreciation expenses from their rental income. In the third column, the depreciation rate for rental units is assumed to be the same as for owner-occupied units. In the fourth column, the depreciation rate for rental units is one percentage point higher than for owner-occupied units.

It is helpful to start with a comparison of columns 2 and 3. If owner-occupiers don't itemize (column 2) and depreciation rates on rental and owned units are the same (col-

Table 2
Rented vs. Owner-Occupied Housing and the Tax Code

	Itemizer Homeowner (1)	Non-itemizer Homeowner (2)	Low-depreciation Renter (3)	High- depreciation Renter (4)
Rental income *	\$6,000	\$6,000	\$6,000	\$6,000
Depreciation	\$1,500	\$1,500	\$1,500	\$2,500
Mortgage interest**	\$4,000	\$4,000	\$4,000	\$4,000
Taxes Paid (25% rate)	NA	NA	\$12 5	\$0
Tax Shield (25% rate)	\$1,000	NA	NA	\$125
Rental income net of interest, taxes and depreciation	\$1,500	\$500	\$375	-\$375

Source: Author calculations.

Notes: * Imputed for homeowners. ** Assumption: 80 percent loan-to-value on a purchase price of \$100,000 and a 5 percent interest rate.

Table 3
Beneficiaries of the Mortgage Interest Tax Deduction by Income Bracket, Tax Year 2009

Adjusted Gross Income (\$)	Returns	% of Returns	Returns Itemizing Mortgage Interest	% Returns Itemizing Mortgage Interest	Total Amount of Mortgage Interest Deductions (\$thousands)	% Total Amount of Mortgage Interest Deductions
	(1)	(2)	(3)	(4)	(5)	(6)
< 15,000	37,624,407	27	1,146,719	3	10,450,143	2
15,000-30,000	30,096,507	21	2,655,450	7	22,724,296	5
30,000-75,000	43,862,952	31	13,217,728	36	119,801,025	28
> 75,000	28,910,262	21	19,521,923	53	267,837,247	64
Total	140,494,128		36,541,820		420,812,711	

Sources: Internal Revenue Service, U.S. Department of the Treasury, "Basic Tables: Returns Filed and Sources of Income," http://www.irs.gov/tax stats/indtaxstats/article/0,,id=134951,00.html; and author calculations.

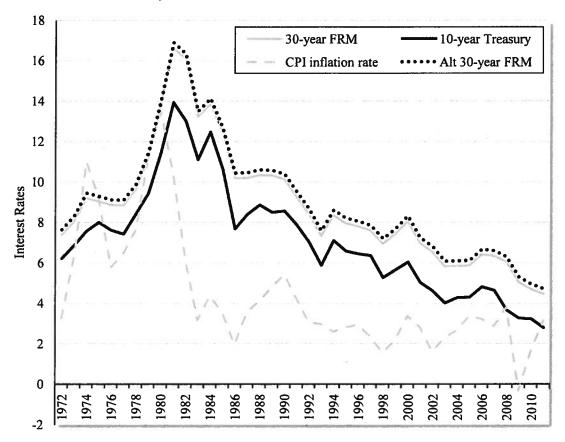
umn 3), then—abstracting from small differences—the tax code does not favor owner-occupancy over renting. Why? Owners of rental units have to declare their rental income on their taxes, and owner-occupiers do not declare their imputed rents as income; but owner-occupiers have no deductible expenses and owners of rental units are allowed to deduct both mortgage interest and depreciation as business expenses. For owners of rental units, these deductions are large enough that the taxes paid on rental income are low and the net benefit of owning over renting is small.

Now compare column 1 to column 3. When households itemize and deduct their mortgage interest from income (column 1), owner-occupancy is tax-advantaged relative to renting (column 3). In the example in the table, the tax code favors owner-occupiers by a significant amount, \$1,125. This occurs because owner-occupied households that itemize report zero rental income but collect a tax shield based on mortgage expenses. This tax shield is used to reduce the tax burden on other sources of income. Owner-occupancy is thus tax-advantaged relative to renting. Rental owners are also allowed to

deduct interest and depreciation expenses, but they report non-zero rental income.

Table 3 shows estimates of taxpayers in tax year 2009 who benefit from the homemortgage interest deduction. The table is organized by income bracket, with each bracket representing roughly 25 percent of returns. Columns 1 and 2 show total returns by income bracket: 27 percent of returns report adjusted gross income less than \$15,000, 21 percent of returns report income between \$15,000 and \$30,000, and so forth. Column 2 shows that the median adjusted gross income on IRS returns is about \$30,000. Columns 3 and 4 report returns, by income bracket, where mortgage interest is itemized as a deduction on the tax return. Column 4 shows that the top 50 percent of income earners (\$30,000 and above) account for 90 percent of returns where mortgage interest has been itemized as a deduction. Column 5 shows data on the total dollar value of the mortgage interest that has been deducted, for those that deducted mortgage interest, by income category. The top 21 percent of income earners (\$75,000 and above) account for 64 percent of the total dollar value of mortgage interest deducted from income.

Figure 2 Various Interest Rates, 1972-2011



Sources: Federal Reserve Board Release H.15, http://federalreserve.gov/releases/h15/data.htm; and author calculations.

The key takeaway from Table 3 is that 90 The mortgage percent of families that itemize mortgage interest interest on their taxes earn above-median deduction is incomes. The mortgage interest deduction is a subsidy for homeownership that is ena subsidy for joyed by relatively high-income earners who, in the absence of a subsidy, should not have trouble buying a house. House prices must ultimately reflect the affordability of housby relatively ing. In the event the mortgage interest dehigh-income duction is phased out and people earning above median income can no longer afford housing (because of the lack of mortgage interest deductibility or some other reason), the price of housing must adjust until housing becomes affordable.

Finally, returning to Table 2, independent of whether or not owner-occupier house-

holds itemize mortgage interest on their tax returns, owning (columns 1 and 2) is strictly preferred to renting (column 4) if the depreciation rate on rental units is significantly higher than for owned units. This has nothing to do with the tax code. When depreciation rates on rental units are high, renting is an expensive way of consuming housing. In this case, homeownership is the efficient way of enjoying housing and, holding all else equal, we would expect markets to deliver high homeownership rates.

Fannie Mae and Freddie Mac

Next, I consider whether the GSEs have boosted homeownership rates by reducing the cost of mortgage interest to homeowners. There is a sizeable literature on this

homeownership that is enjoyed earners who, in the absence of a subsidy, should not have trouble buying a house.

topic. A mainstream estimate is that Fannie and Freddie have lowered mortgage interest rates by about 25 basis points⁴ (that is, 0.25 percentage points), and credible estimates are as small as 7 basis points.⁵

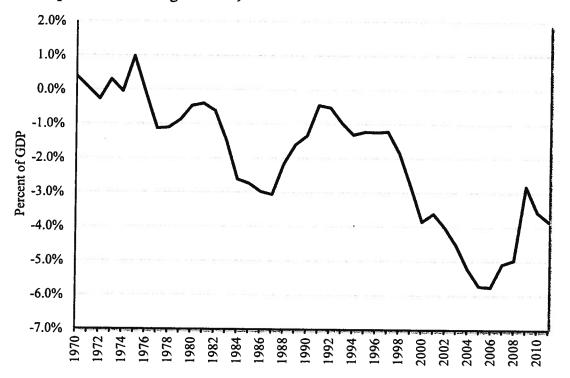
Suppose that the GSEs have lowered borrowing costs by 25 basis points. A strong case can be made that the impact of the GSEs on borrowing costs has been irrelevant given overall trends for interest rates. Figure 2 shows data starting in 1972 on various interest rates. The lighter solid line is the typical rate of interest on a 30-year fixed-rate mortgage. The darker solid line is the 10-year Treasury rate. The dashed line is the inflation rate. From 1970 through 1990 mortgage rates, the 10-year Treasury rate, and the inflation rate increased (1970-1980) and then fell (1980-1990) together. Starting in 1990 the inflation rate stabilized at about 2½ percent per year, but the 10-year Treasury and mortgage rates continued to fall. In 1990 the rate of interest on a 30-year fixed rate mortgage was about 10 percent. Today the rate of interest on a 30-year fixed rate mortgage is about 4 percent.

The dotted line that lies slightly above the solid line is the hypothetical rate of interest on a 30-year fixed rate mortgage that would have been expected to prevail if Fannie and Freddie had not existed. At every date, the dotted line is 25 basis points above the solid line. However, relative to the large time-series decline in mortgage rates starting in 1990, 25 basis points is inconsequential. Large macro trends have made the GSEs' impact on mortgage rates look trivial.

A commonly articulated view is that free trade caused interest rates to fall after 1990 because foreign investors readily lent money to American borrowers. Figure 3 shows the United States has been running a trade deficit with the rest of the world since 1975, which means that on net, each year U.S. residents receive goods and services from abroad and foreigners receive U.S. assets as payment.

Large macro trends have made the GSEs' impact on mortgage rates look trivial.

Figure 3 Net Exports as Percentage of GDP, 1970–2011



Source: Bureau of Economic Analysis, U.S. Department of Commerce; National Income and Product Accounts, Table 1.1.5, http://bea.gov/iTable/iTable.cfm?ReqID=9&step=1.

The one policy that has had the greatest impact on the cost of mortgage interest has been free trade. Because our trading partners have wanted to export goods and services to us, they must accumulate U.S. assets, and this has lowered yields on those assets.⁶ It is commonly thought that foreign accumulation of U.S. assets has caused the gradual decline in mortgage interest rates that started around 1990 and then accelerated in the 2000s. In summary Figure 3 demonstrates that the one policy that has had the greatest impact on the cost of mortgage interest has been free trade; and, in the event that U.S. trading partners decide they no longer wish to accumulate U.S. assets, mortgage interest rates will rise independently of whatever the GSEs are doing.

Finally, note that homeownership rates have been relatively stable since 1970, despite the dramatic rise and decline of mortgage rates. This is prima facie evidence that mortgage rates are uncorrelated with homeownership. It is suggestive that policies that attempt to boost homeownership rates by reducing the cost of mortgage interest to most homeowners will be of limited success.

Disputing the Benefits of Homeownership

Typically, policymakers list four benefits to homeownership that can be summarized as follows:⁷

- 1. Through homeownership, a family ... invests in an asset that can grow in value and ... generate financial security.
- 2. Homeownership enables people to have greater control and exercise more responsibility over their living environment.
- Homeownership helps stabilize neighborhoods and strengthen communities.
- 4. Homeownership helps generate jobs and stimulate economic growth.

These points are refutable. Starting with the first, homeownership is not necessarily

the right way to build wealth for many because housing is risky and house prices can decline. According to data from the S&P/ Case-Shiller Home Price Indices,8 since June 2006 nominal house prices have fallen by 38 percent in San Francisco, 45 percent in Tampa Bay, 49 percent in Miami, 56 percent in Phoenix, and 59 percent in Las Vegas, to name just a few examples. These significant declines are not unique to the 2006-2011 time period. For example, data from the Federal Housing Finance Authority suggest that house prices in San Antonio fell by 25 percent in nominal terms between 1984 and 1990, and house prices in Los Angeles fell by 23 percent between 1990 and 1995.9 Since housing is a risky asset, it must pay on average a non-negligible positive rate of return. Whether or not homeowners are compensated appropriately for the amount of risk they assume is currently being debated. 10

The fact that housing is a risky asset with some other peculiar risks means that it is not an appropriate investment for many. In a speech on January 5, 2010, Federal Reserve Board economist Karen Pence articulated some other risks associated with housing:

- It is an indivisible asset.
- Any given house is subject to locationspecific shocks that cannot easily be diversified away.
- Buying and selling housing involves large transaction costs that are typically not associated with renters.
- Housing can be difficult to sell (that is, it is illiquid) during downturns, when, for many, a sale is most desirable.
- In smaller markets, the labor market and housing market are correlated, such that a closing of a plant in a small town leaves people without jobs and with less-valuable housing.

The second and third potential benefits to homeownership listed above are more difficult to measure and also more difficult to refute. Green and White and others estimate that children from lower-income families

tend to have better outcomes, such as increased high school graduation rates, when their parents own a home. 11 But other intangible benefits are likely correlated with homeownership and not caused by homeownership. The distinction is important because homeownership is an expensive choice. Most of the population does not randomly choose between homeownership and renting; and this randomness of assignment is a requirement of statistical analysis that attempts to estimate the benefits derived from homeownership.¹² For example, it is not surprising that homeowners tend to have more income and be wealthier than renters, but this does not mean that homeownership causes higher income and more wealth. Standard mortgage underwriting requires that home buyers have a down payment (wealth) and a sufficient income stream (income); thus homeowners will be selected from a sample of high-income and high-wealth households that can qualify for a mortgage. People with more income and wealth will, on average, demand to live in nice neighborhoods. They will also have the financial means to exercise more control over their living environment.

In addition, we expect that homeowners will tend to move less frequently than renters, which will make mostly-owned-home neighborhoods appear more stable than mostly-renter neighborhoods. The sale of a home involves high transaction costs, which implies that a family will only buy a home if they expect to live in that home for a relatively long time. Homeownership will therefore be correlated with neighborhood stability but might not necessarily cause it.

The fourth commonly listed benefit of homeownership is that homeownership generates jobs and stimulates economic growth. For example, the U.S. Department of Housing and Urban Development states:

Perhaps the greatest macroeconomic benefit of home-ownership is seen in the millions of jobs it creates for American workers. Building 1,000 single-family homes creates almost 2,100

full-time jobs. Almost half of these jobs are in onsite construction work; another 20 percent involve employment in transportation, trade, and other locally based services.¹³

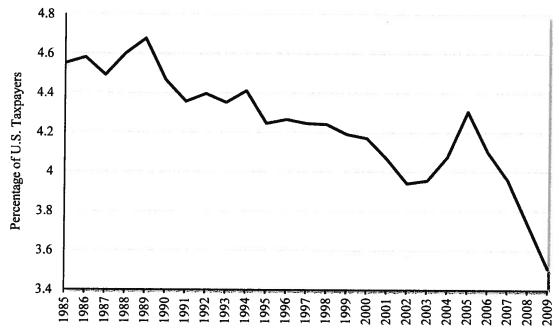
This idea that homeownership per se provides these kinds of economic benefits is astonishingly incorrect. To start, it takes labor to build any housing unit, owned or rented. Further, over long periods of time, the unemployment rate and the homeownership rate are uncorrelated. For example, the homeownership rate in 1950 was 55 percent and in 1990 it was 64 percent, almost 9 percentage points higher; whereas the unemployment rates in both years were nearly identical, 5.3 percent in 1950 and 5.6 percent in 1990.

In fact, there is some evidence that high homeownership rates may currently be inhibiting job creation. Figure 4 shows timeseries data on across-metro-area migration rates for taxpayers. The data show a continuous downward trend over the entire sample, but there is a precipitous drop in migration rates starting in 2005. There is a lot of debate about why migration rates fell so fast after 2005. Some argue it is just a continuation of trends that started in the mid 1980s. Others have argued that it is due to the fact that many people own homes worth less than their mortgages and can't move. This lack of migration may be bad in the sense that people are not filling higher-wage jobs in different metro areas. That said, there is some evidence that migration rates for renters has also sharply declined after 2005 and more research on this topic is needed.¹⁴

Finally and perhaps most importantly, homeownership rates are not correlated with across-country standards of living. Table 4 lists homeownership rates and gross domestic product per capita (adjusted for purchasing power parity) for a set of advanced economies. The table shows that some relatively poor countries like Mexico, Greece, and Spain have higher homeownership rates than the United States and some relatively rich countries like Austria, Den-

Homeownership rates are not correlated with across-country standards of living.

Figure 4 Across-MSA Mobility Rates, 1985–2009 (percentage of taxpayers)



Source: Morris Davis, Jonas D. M. Fisher, and Marcelo Veracierto, 2011, "The Role of Housing in Labor Reallocation," Federal Reserve Bank of Chicago working paper 2010-18.

mark, Germany, and Switzerland have lower homeownership rates. In terms of the set of countries with data shown in Table 4, the United States is about in the middle of the pack in terms of its homeownership rate. The overall correlation of homeownership rates and standards of living is just about zero. If homeownership causes an increase in economic output, it is hard to observe from the data in Table 4.

Unintended Consequences of Homeownership as a Public Policy Goal

It is quite possible that government policies to promote homeownership amplified the recent housing boom and bust. At a minimum, government officials failed to try to soften the housing boom. For example, according to a *New York Times* article dated December 21, 2008:

Lawrence B. Lindsey, [President George W.] Bush's first chief economics adviser, said there was little impetus to raise alarms about the proliferation of easy credit that was helping Mr. Bush meet housing goals. "No one wanted to stop that bubble," Mr. Lindsey said. "It would have conflicted with the president's own policies."

The housing goals Lindsey refers to are related to homeownership targets for the relatively poor and underserved. To achieve those goals, HUD, under both presidents Bill Clinton and George W. Bush, directed Fannie Mae and Freddie Mac to increase the amount of mortgages they purchase from targeted income and geographic groups. Table 5 reports a summary of those directives. In 1992 HUD dictated that 30 percent of Fannie Mae and Freddie Mac's mortgage purchases should be from loans to low-income households. In 1996, the start of the housing boom, this target was increased to

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40 percent. Between 2001 and 2007, a period of rapid acceleration of house prices, the low-income-mortgage target was gradually increased to 55 percent. Changes to other HUD low-income targets for Fannie and Freddie show similar time-series patterns.

Fannie Mae claims these targets affected its operation. According to Fannie's 10-K filed in May 2007:

We have [also] relaxed some of our underwriting criteria to obtain goals-

qualifying mortgage loans and increased our investments in higher-risk mortgages that are more likely to serve the borrowers targeted by HUD's goals and subgoals. ¹⁶

The data on Fannie Mae and Freddie Mac's loan purchases, shown in Table 6, confirm that the percentage of higher-risk loans purchased gradually increased from 2003 to 2007. Focusing on Fannie Mae's books, the percentage of loans purchased with loan-to-

Fannie Mae claims these targets affected its operation.

Table 4
GDP per capita (adjusted for purchasing power parity) and Homeownership Rates,
Various Countries, 2004

	2004 Real GDP (PPP) per capita	2004 Homeownership Rate
Spain	27,453	83.2
Ireland	35,457	81.4
Greece	25,456	73.2
Belgium	33,088	71.7
Mexico	10,682	70.7
United Kingdom	33,223	70.7
Australia	36,486	69.5
Luxembourg	67,856	69.3
Canada	35,640	68.9
United States	40,908	68.7
Italy	29,404	67.9
Finland	30,779	66.0
Netherlands	37,590	55.4
France	30,492	54.8
Austria	35,175	51.6
Denmark	33,861	51.6
Germany	31,389	41.0
Switzerland	36,848	38.4
Correlation	-7%	

Sources: Robert Summers, Alan Heston, and Bettina Aten, Penn World Table, "PPP Converted GDP Per Capita (Chain Series)," 5/2011, at 2005 constant prices; and Dan Andrews and Aida Caldera Sanchez, 2011, "Drivers of Homeownership Rates in Selected OECD Countries," Organization for Economic Co-operation and Development, Economics Department Working Papers no. 849, http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP%282011%2918&docLanguage=En.

Table 5
HUD Targets for Fannie Mae and Freddie Mac, Various Years (percentage of the total number of dwelling units underlying total mortgage purchases)

	1992	1996	1997	2001	2005	2006	2007	2008	2009
Low- and moderate- income (%)	30*	40	42	50	52	53	55	56	43
Geographic target (%)*	21	24	31	37	38	38	39	32	
Special affordable (%)**	12	14	20	22	23	25	27	18	

Source: Therea R. DiVenti, 2009, "Fannie Mae and Freddie Mac: Past, Present, and Future," Cityscape: A Journal of Policy Development and Research 11 (2009): 231-42.

Notes: *Total for low- and moderate-income and housing located in central cities. **Borrowers with less than 60 percent of their metro area's median income.

Table 6 Characteristics of Fannie Mae and Freddie Mac Loan Purchases, 2003–2007 (percentages are by volume of purchases)

Loan	Purchases	2003 (%)	2004 (%)	2005 (%)	2006 (%)	2007 (%)
Fannie Mae	Loan-to-value > 90%	8	8	9	10	16
	Interest Only	1	2	10	15	16
Freddie Mac	Loan-to-value > 90%	7	7	6	8	15
	Interest Only	0	2	9	19	20

Source: Mark Calabria, "Fannie, Freddie, and the Subprime Mortgage Market," Cato Institute Briefing Paper no. 120, March 7, 2011.

value greater than 90 percent at origination (that is, the size of the loan was at least 90 percent of the value of the house, and thus the homebuyer was putting little of his own wealth at risk) doubled between 2003 and 2007. Also, the share of interest-only loans (that is, loans in which the borrower is not required to pay down the principal until the end of the loan) that Fannie purchased increased from 1 percent in 2003 to 16 percent by 2007. Patterns for Freddie Mac are similar.

Some researchers dispute that the HUD directives affected Fannie Mae and Freddie

Mac's purchases of risky mortgages.¹⁷ Table 6 confirms that the timing of purchases does not exactly align with the HUD directives. But my point here is that HUD encouraged Fannie and Freddie to expand mortgage credit and assume an increasingly risky portfolio at the height of the largest housing boom the United States experienced in at least 50 years. The housing boom was itself likely caused by the expansion of mortgage credit by private lenders. HUD thus encouraged the GSEs to engage in more risky mortgage lending at a point in time when risky mortgages were un-

usually widely available. If HUD had instead been concerned that the housing boom was in fact a "bubble," it might have directed Fannie and Freddie to scale back rather than expand lending.

Conclusions

In this paper, I have presented evidence that policies designed to promote homeownership are ineffective and poorly motivated. They are also expensive: the present value of the cost of homeownership subsidies equals \$2.5 trillion. The body of evidence suggests we need to unwind the current set of public policies designed to promote homeownership and rethink whether homeownership is a desirable public policy goal.

Notes

- 1. Estimate from "The Budgetary Cost of Fannie Mae and Freddie Mac and Options for the Future Federal Rose in the Secondary Mortgage Market," Testimony before the House Committee on the Budget, June 2, 2011, http://www.cbo.gov/publication/41487.
- 2. Joseph Gyourko, "Is FHA the Next Housing Bailout?" American Enterprise Institute, November 2011.
- 3. A more common estimate is that the deductibility of mortgage interest reduced U.S. federal tax revenues by \$91 billion in 2011. The estimate of \$60 billion assumes that households would adjust their financial portfolios optimally after tax reform, whereas the \$91 billion assumes households do not adjust their portfolio after tax reform. See James Poterba and Todd Sinai, "Revenue Costs and Incentive Effects of the Mortgage Interest Deduction for Owner-Occupied Housing," working paper, University of Pennsylvania, 2010.
- 4. For example, the former director of the Congressional Budget Office, Dan L. Crippen, said in his May 23, 2001, testimony to the Committee on Financial Services U.S. House of Representatives, "CBO estimates that interest rates on mortgages are reduced by one-quarter of one percentage point (0.25 percentage points, or 25 basis points) as a result of the federal subsidy."

- 5. Wayne Passmore, Shane M. Sherlund, and Gillian Burgess, "The Effect of Housing Government-Sponsored Enterprises on Mortgage Rates," *Real Estate Economics* 33 (2005): 427–63.
- 6. Alternatively, our trading partners have wished to accumulate our assets (thus pushing down their yields), requiring them to export their goods and services to us as payment.
- 7. These are taken from "Homeownership and Its Benefits," Department of Housing and Urban Development Urban Policy Brief no. 2, August, 1995, http://www.huduser.org/publications/txt/hdbrf2.txt.
- 8. The S&P/Case-Shiller data are available at http://www.standardandpoors.com/home/en/us.
- 9. The Federal Housing Finance Authority house price data are available at http://www.fhfa.gov/Default.aspx?Page=87.
- 10. Sean Campbell, Morris A. Davis, Joshua Gallin, and Robert F. Martin, "What Moves Housing Markets: A Variance Decomposition of the Rent-Price Ratio," *Journal of Urban Economics* 14 (2009): 248–61.
- 11. Richard K. Green and Michelle J. White, "Measuring the Benefits of Homeowning: Effects on Children," *Journal of Urban Economics* 41 (1997): 441-61.
- 12. Ibid. addresses the nonrandom assignment of families into owned or rented homes by using a "selection model" that explicitly accounts for the fact that ownership is a choice. Other studies attempt to break the nonrandom nature of the homeownership choice by using an approach called "instrumental variables."
- 13. These are taken from "Homeownership and Its Benefits," Department of Housing and Urban Development Urban Policy Brief no. 2, August, 1995, http://www.huduser.org/publications/txt/hdbrf2.txt.
- 14. Raven Molloy, Christopher L. Smith, and Abigail Wozniak, "Internal Migration in the United States," Federal Reserve Board Finance and Economics Discussion Series, 2011-30, 2011.
- 15. Jo Becker, Sheryl Gay Stolberg, and Stephen Labaton, "White House Philosophy Stoked Mortgage Bonfire," *New York Times*, http://www.nytimes.com/2008/12/21/business/21admin.html?_r=1&pagewanted=all.
- 16. Mark Calabria, "Fannie, Freddie, and the Subprime Mortgage Market," Cato Institute Briefing Paper no. 120, March 7, 2011. p. 8.

17. Ruben Hernandez-Murillo, Andra Ghent, and Michael T. Owyang, "Did Affordable Housing Legislation Contribute to the Subprime Se-

curities Boom?" The Big Picture Working Paper, 2012.

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